

§ 195.561

- (c) Be sufficiently ductile to resist cracking;
- (d) Have enough strength to resist damage due to handling and soil stress;
- (e) Support any supplemental cathodic protection; and
- (f) If the coating is an insulating type, have low moisture absorption and provide high electrical resistance.

§ 195.561 When must I inspect pipe coating used for external corrosion control?

- (a) You must inspect all external pipe coating required by § 195.557 just prior to lowering the pipe into the ditch or submerging the pipe.
- (b) You must repair any coating damage discovered.

§ 195.563 Which pipelines must have cathodic protection?

- (a) Each buried or submerged pipeline that is constructed, relocated, replaced, or otherwise changed after the applicable date in § 195.401(c) must have cathodic protection. The cathodic protection must be in operation not later than 1 year after the pipeline is constructed, relocated, replaced, or otherwise changed, as applicable.
- (b) Each buried or submerged pipeline converted under § 195.5 must have cathodic protection if the pipeline—
 - (1) Has cathodic protection that substantially meets § 195.571 before the pipeline is placed in service; or
 - (2) Is a segment that is relocated, replaced, or substantially altered.
- (c) All other buried or submerged pipelines that have an effective external coating must have cathodic protection.¹ Except as provided by paragraph (d) of this section, this requirement does not apply to breakout tanks and does not apply to buried piping in breakout tank areas and pumping stations until December 29, 2003.
- (d) Bare pipelines, breakout tank areas, and buried pumping station piping must have cathodic protection in places where regulations in effect before January 28, 2002 required cathodic protection as a result of electrical in-

¹ A pipeline does not have an effective external coating material if the current required to cathodically protect the pipeline is substantially the same as if the pipeline were bare.

49 CFR Ch. I (10–1–12 Edition)

spections. See previous editions of this part in 49 CFR, parts 186 to 199.

- (e) Unprotected pipe must have cathodic protection if required by § 195.573(b).

§ 195.565 How do I install cathodic protection on breakout tanks?

After October 2, 2000, when you install cathodic protection under § 195.563(a) to protect the bottom of an aboveground breakout tank of more than 500 barrels (79.5m³) capacity built to API Specification 12F, API Standard 620, or API Standard 650 (or its predecessor Standard 12C), you must install the system in accordance with API Recommended Practice 651. However, installation of the system need not comply with API Recommended Practice 651 on any tank for which you note in the corrosion control procedures established under § 195.402(c)(3) why compliance with all or certain provisions of API Recommended Practice 651 is not necessary for the safety of the tank.

§ 195.567 Which pipelines must have test leads and what must I do to install and maintain the leads?

- (a) *General.* Except for offshore pipelines, each buried or submerged pipeline or segment of pipeline under cathodic protection required by this subpart must have electrical test leads for external corrosion control. However, this requirement does not apply until December 27, 2004 to pipelines or pipeline segments on which test leads were not required by regulations in effect before January 28, 2002.
- (b) *Installation.* You must install test leads as follows:
 - (1) Locate the leads at intervals frequent enough to obtain electrical measurements indicating the adequacy of cathodic protection.
 - (2) Provide enough looping or slack so backfilling will not unduly stress or break the lead and the lead will otherwise remain mechanically secure and electrically conductive.
 - (3) Prevent lead attachments from causing stress concentrations on pipe.
 - (4) For leads installed in conduits, suitably insulate the lead from the conduit.
 - (5) At the connection to the pipeline, coat each bared test lead wire and

bared metallic area with an electrical insulating material compatible with the pipe coating and the insulation on the wire.

(c) *Maintenance.* You must maintain the test lead wires in a condition that enables you to obtain electrical measurements to determine whether cathodic protection complies with § 195.571.

§ 195.569 Do I have to examine exposed portions of buried pipelines?

Whenever you have knowledge that any portion of a buried pipeline is exposed, you must examine the exposed portion for evidence of external corrosion if the pipe is bare, or if the coating is deteriorated. If you find external corrosion requiring corrective action under § 195.585, you must investigate circumferentially and longitudinally beyond the exposed portion (by visual examination, indirect method, or both) to determine whether additional corrosion requiring remedial action exists in the vicinity of the exposed portion.

§ 195.571 What criteria must I use to determine the adequacy of cathodic protection?

Cathodic protection required by this Subpart must comply with one or more of the applicable criteria and other considerations for cathodic protection contained in paragraphs 6.2 and 6.3 of NACE SP 0169 (incorporated by reference, *see* § 195.3).

[Amdt. 195-94, 75 FR 48607, Aug. 11, 2010]

§ 195.573 What must I do to monitor external corrosion control?

(a) *Protected pipelines.* You must do the following to determine whether cathodic protection required by this subpart complies with § 195.571:

(1) Conduct tests on the protected pipeline at least once each calendar year, but with intervals not exceeding 15 months. However, if tests at those intervals are impractical for separately protected short sections of bare or ineffectively coated pipelines, testing may be done at least once every 3 calendar years, but with intervals not exceeding 39 months.

(2) Identify not more than 2 years after cathodic protection is installed, the circumstances in which a close-in-

terval survey or comparable technology is practicable and necessary to accomplish the objectives of paragraph 10.1.1.3 of NACE SP 0169 (incorporated by reference, *see* § 195.3).

(b) *Unprotected pipe.* You must re-evaluate your unprotected buried or submerged pipe and cathodically protect the pipe in areas in which active corrosion is found, as follows:

(1) Determine the areas of active corrosion by electrical survey, or where an electrical survey is impractical, by other means that include review and analysis of leak repair and inspection records, corrosion monitoring records, exposed pipe inspection records, and the pipeline environment.

(2) For the period in the first column, the second column prescribes the frequency of evaluation.

| Period | Evaluation frequency |
|------------------------------|---|
| Before December 29, 2003 ... | At least once every 5 calendar years, but with intervals not exceeding 63 months. |
| Beginning December 29, 2003. | At least once every 3 calendar years, but with intervals not exceeding 39 months. |

(c) *Rectifiers and other devices.* You must electrically check for proper performance each device in the first column at the frequency stated in the second column.

| Device | Check frequency |
|--|--|
| Rectifier | At least six times each calendar year, but with intervals not exceeding 2½ months. |
| Reverse current switch. Diode. Interference bond whose failure would jeopardize structural protection. | |
| Other interference bond | At least once each calendar year, but with intervals not exceeding 15 months. |

(d) *Breakout tanks.* You must inspect each cathodic protection system used to control corrosion on the bottom of an aboveground breakout tank to ensure that operation and maintenance of the system are in accordance with API Recommended Practice 651. However, this inspection is not required if you note in the corrosion control procedures established under § 195.402(c)(3)